

UNDER SECRETARY OF DEFENSE FOR
ACQUISITION AND TECHNOLOGY

ASSISTANT SECRETARY OF DEFENSE FOR
COMMAND, CONTROL, COMMUNICATIONS
& INTELLIGENCE (C3I)

RULES OF THE ROAD

A GUIDE FOR LEADING SUCCESSFUL INTEGRATED PRODUCT TEAMS

November 1995

Foreword

On May 10, 1995, Secretary Perry directed the Department to apply the Integrated Product and Process Development (IPPD) concept of using IPTs throughout the acquisition process. That direction has been captured in the draft revisions to the DoDD 5000.1 and the DoDI 5000.2. This guide clarifies the instructions contained in those directives for Overarching IPTs (OIPTs) and Working-Level IPTs (WIPTs). Program IPTs are described in the draft "Guide to Implementation and Management of IPPD in DoD Acquisition." This guide is intended to facilitate organizing and leading effective and efficient Integrated Product Teams (IPTs) that will serve the Acquisition Community and ultimately enhance our capability to provide systems that satisfy the Warfighter's needs.

The guidance in the extracts from draft DoDI 5000.2 will be mandatory. The other guidelines are not mandatory, but they represent sound business practices and will be included in the discretionary section of the Acquisition Deskbook. This guide describes the IPT process for ACAT ID and IAM acquisition programs, but the concepts should be considered for all programs.

These guidelines are not intended in any way to detract from the responsibility and authority of the Program Manager (PM). The IPT activities discussed on the following pages are designed to assist the PM by engaging OSD and Service staff in early and continuous support and by identifying and resolving issues as early and as quickly as possible. The staff's mission is to ensure the PM's success.

This is a "living" document. The draft DoDD 5000.1 and draft DoDI 5000.2 are still under revision; this guide will change in parallel with those documents. Your comments, questions, and recommendations to improve this document are encouraged. Please address them to Mr. John Smith, Acquisition Program Integration, at (703) 614-5420 or e-mail "smithje@am@zeus" or Dr. Margaret Myers, C3I Acquisition Oversight, at (703) 681-4986 or e-mail "margaret.myers@osd.mil".

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INTRODUCTION

References

- (a) "Reengineering the Acquisition Oversight and Review Process," USD(A&T), April 28, 1995
- (b) "Use of Integrated Product and Process Development and Integrated Product Teams in DoD Acquisition," Secretary of Defense, May 10, 1995
- (c) Draft DoD Directive 5000.1 and draft DoD Instruction 5000.2, October 14, 1995
- (d) "Guide to Implementation and Management of Integrated Product and Process Development in DoD Acquisition" (draft)

Purpose of IPTs

As Secretary Perry stated in his May 10, 1995 memorandum, the IPT concept for oversight and review is intended to replace the current sequential process that produces a product at the program office level which frequently, when reviewed at higher levels, is modified substantially or even rejected. Such a sequential review and approval process takes considerably longer than an IPT approach that simultaneously takes advantage of all members' expertise and produces an acceptable product the first time. The purpose of IPTs is to facilitate decision-making by making recommendations based on timely input from the entire team.

Figure 1 shows the focus and responsibilities of three types of IPTs.

Organizat Teams	Focus	Participant
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ion	Responsibilities		
	OIPT*	ú Strategic Guidance	ú Program Success
		ú Tailoring	ú Functional Area
			Leadership
OSD and Component s		ú Program Assessment	ú Independent Assessment
		ú Resolve Issues Elevated by WIPTs	ú Issue Resolution
Program Teams & System Contractors	WIPTs*	ú Planning for Program Success	ú Functional Knowledge & Experience
		ú Opportunities for Acquisition Reform (e.g., innovation, streamlining)	ú Empowered Contribution
			ú Recommendations for Program Success
		ú Identify/Resolve Program Issues	ú Communicate Status & Unresolved Issues
		ú Program Status	
	Program Teams & System Contractors	ú Program Execution	ú Manage Complete Scope of Program, Resources & Risk
		ú Identify & Implement Acquisition Reform	ú Integrate Government & Contractor Efforts for Program Success
			ú Report Program Status & Issues

* Covered by this guide

** See the "Guide to Implementation and Management of IPPD in DoD Acquisition"

Figure 1. DoD IPT Types, Focus and Responsibilities

INTEGRATED PRODUCT TEAMS IN THE OVERSIGHT AND REVIEW PROCESS

For ACAT ID and IAM programs, mandatory guidance for OIPTs and WIPTs is provided in Part 5.4 of the new draft DoDI 5000.2 as extracted below. (Mandatory guidance for program IPTs is provided in Part 4.2 of the draft DoDI 5000.2.)

IPTs are an integral part of the defense acquisition oversight and review process. The Secretary of Defense has directed that the Department perform as many acquisition functions as possible, including oversight and review, using IPTs. These IPTs shall function in a spirit of teamwork with participants empowered and authorized, to the maximum extent possible, to make commitments for the organization or the functional area they represent. IPTs are composed of representatives from all appropriate functional disciplines working together to build successful programs and enabling decision-makers to make the right decisions at the right time.

IPTs operate under the following broad principles:

- Open discussions with no secrets
- Qualified, empowered team members
- Consistent, success-oriented, proactive participation
- Continuous "up-the-line" communications
- Reasoned disagreement
- Issues raised and resolved early

Figure 2 shows the oversight and review IPT structure.

For each program, there will be an OIPT and at least one WIPT. WIPTs will focus on a particular topic, such as test, cost/performance, contracting, etc. An Integrating IPT will coordinate WIPT efforts and cover all topics not otherwise assigned to another IPT.

Figure 2. IPT Structure

WORKING-LEVEL IPTs PROCEDURES, ROLES, AND RESPONSIBILITIES (Extracted from Draft DoDI 5000.2, Part 5.4.2)

The PM, or designee, shall form and lead an Integrating IPT (IIPT) to support the development of strategies for acquisition and contracts, cost estimates, evaluation of alternatives, logistics management, cost-performance trade-offs, etc. The IIPT will assist the PM in the development of a WIPT structure to propose to the OIPT. The IIPT will also coordinate the activities of the remaining WIPTs and ensure that issues not formally addressed by other WIPTs are reviewed. WIPTs shall meet as required to help the PM plan program structure and documentation and resolve issues. While there is no one-size-fits-all WIPT approach, there are three basic tenets to which any approach shall adhere:

The PM is in charge of the program.

IPTs are advisory bodies to the PM.

Direct communication between the program office and all levels in the acquisition oversight and review process is expected as a means of exchanging information and building trust.

The Leader of each IPT will usually be the PM or the PM's representative. The OSD action officer may co-chair the IPT meetings, at the invitation of the PM. The following roles and responsibilities apply to all WIPTs:

- Assist the PM in developing strategies and in program planning, as requested by the PM
- Establish IPT plan of action and milestones

- Propose tailored document and milestone requirements
- Review and provide early input to documents
- Coordinate WIPT activities with the OIPT members
- Resolve or elevate issues in a timely manner
- Assume responsibility to obtain principals' concurrences on issues, as well as with applicable documents or portions of documents

Examples of WIPTs

The following examples of WIPTs are offered as illustrations:

Test Strategy IPT

(Extracted from Secretary Perry's May 10, 1995 memo)

The purpose of the IPT is to assist in outlining the Test and Evaluation Master Plan (TEMP) for a major program. The objective of such an IPT is to reach agreement on the strategy and plan by identifying and resolving issues early, understanding the issues and the rationale for the approach, and, finally, documenting a quality TEMP that is acceptable to all organizational levels the first time.

Cost-Performance IPT

(Extracted from Draft DoDI 5000.2, Part 3.3.1)

The purpose of the CPIPT shall be to facilitate cost-performance trades and to assist in establishing program cost-range objectives. Cost objectives shall be used as a management tool. They should be communicated to industry and used, in part, for source selection and to incentivize contracts. The nature of the cost-performance trades and the composition of the CPIPT shall change as the program matures from concept to design. As the program matures, the role of the PM in the CPIPT increases. The CPIPT (normally led by the PM or the PM's representative and including, at a minimum, the user or user's representative) shall recommend to the PM performance or engineering and design changes as long as the threshold values in the Operational Requirements Document (ORD) and Acquisition Program Baseline (APB) can be achieved. If the changes require ORD/APB threshold value changes, the leader of the CPIPT shall notify the PM and the OIPT leader. The PM shall ensure that the changes are brought before the ORD and/or APB approval authorities for decision.

OVERARCHING IPT PROCEDURES AND ASSESSMENTS

(Extracted from Draft DoDI 5000.2, Part 5.4.1)

In support of all ACAT ID and IAM programs, an Overarching Integrated Product Team (OIPT) shall be formed for each program to provide assistance, oversight and review as that program proceeds through its acquisition life-cycle. The OIPT for ACAT ID programs shall be led by the appropriate Office of the

Secretary of Defense (OSD) official (typically the Director of Strategic and Tactical Systems, the Assistant Deputy Under Secretary of Defense (Space and Acquisition Management), or the Deputy Assistant Secretary of Defense (C3I Acquisition), depending on the program in question). The DASD (C3I Acquisition) will designate the OIPT Leader for each ACAT IAM program. OIPTs shall be composed of the PM, Program Executive Officer (PEO), Component Staff, Joint Staff, USD(A&T) staff, and the OSD staff principals or their representatives, involved in oversight and review of a particular ACAT ID or IAM program.

The OIPT shall first form upon learning that a program is intended to be initiated to consider the recommendations proposed by the IIPT; the extent of WIPT support needed for the potential program; who shall participate on the WIPTs; the appropriate milestone for program initiation; and, the minimum information needed for the program initiation review. OIPTs shall meet as necessary over the life of a program. The OIPT Leader shall take action to resolve issues when requested by any member of the OIPT, or when directed by the Milestone Decision Authority (MDA). The goal is to resolve as many issues and concerns at the lowest level possible, and to expeditiously escalate issues that need resolution at a higher level, bringing only the highest level issues to the MDA for decision.

In support of a planned milestone review by the Defense Acquisition Board (DAB) or Major Automated Information System Review Council (MAISRC), the OIPT shall normally convene two weeks in advance of the anticipated review to assess information and recommendations being provided to the MDA. Additionally, at that meeting, the PM shall propose the WIPT structure, documentation, and strategy for the next acquisition phase, for approval by the MDA. The OIPT Leader, in coordination with the appropriate Component Acquisition Executive (CAE), shall recommend to the MDA whether the anticipated review should go forward as planned.

The OIPT leader for ACAT ID or IAM programs shall provide an independent assessment to the DAB or MAISRC chairs, principals, and advisors at major program reviews and milestone decision reviews using information gathered through the IPT process. The leader's independent assessment shall focus on core acquisition management issues and shall take account of assessments prepared by OIPT members. Assessments will normally be provided by the OIPT members. There should be no surprises at this point, because all team members are already working the issues in real time, and they should be knowledgeable of their OIPT leader's independent assessment.

GROUND RULES FOR IMPLEMENTING IPTs

Open Discussions with No Secrets

Cooperation is essential. Teams must have full and open discussions with no secrets. All facts must be on the table for each team member to understand and assess. Each member brings unique expertise to the team that needs to be recognized by all. Because of that expertise, each person's views are important in developing a successful program, and these views need to be heard. Full and open discussion does not mean that each view must be acted on by the team.

A sense of ownership on the part of the IPT members is key to the success of the IPT process. However, a sense of ownership is not possible if the members of the IPT are expected to merely rubber stamp a decision or document prepared in a different setting. Ownership is a collective concept. All IPT members must feel that their contributions were important to the process and were well considered.

Qualified, Empowered Team Members

Empowerment is critical to making and keeping the agreements essential to effective IPTs. All representatives assigned to IPTs at all levels must be empowered by their leadership. They must be able to speak for their superiors, the "principals," in the decision-making process. IPT members cannot be expected to have the breadth of knowledge and experience of their leadership in all cases. However, they are expected to be in frequent communication with their leadership, and thus ensure that their advice to the PM is sound and will not be changed later, barring unforeseen circumstances or new information. One of the key responsibilities of our leadership is to train and educate their staff so they will have the required knowledge and skills to represent their organization.

IPT members must make team members aware of any limits to their ability to speak for their principals. IPT agreements cannot be binding if they exceed the limits of a member's empowerment. Staff representatives must seek direction from their superiors on the limits of their authority and make recommendations only within those limits. Leaders will enhance staff effectiveness by granting the greatest possible authority.

It is important for the IPT leader to stress at the outset that, in general, agreements reached in the IPT must be binding. An exception to this general rule would be the rare case where new information comes to light after agreements have been reached, and that new information is significant enough to warrant a review of prior agreements.

Consistent, Success-Oriented, Proactive Participation

IPTs should be organized to allow all stakeholders to participate. There should be no attempt to limit membership. OIPTs will typically draw their membership from the organizations shown in Figure 3. Other organizations may be added based on the

needs of the program. WIPTs will include action officers from the program office (or agency staff if the program is pre-Milestone I) and from the staff organizations represented on the OIPT. When possible, each WIPT member should have an alternate to ensure continuity. Contractor participation shall be in accordance with guidance in draft DoDI 5000.2, Part 4.2.1.

OIPT LEADERS

DAB	MAISRC
ú DASD (C3I Acquisition)	Director, Acquisition Oversight,
ú Director, Strategic & Tactical Systems	ODASD (C3IA)
ú ADUSD (Space)	

OIPT MEMBER OFFICES

Component Acquisition Executives	Assistant Secretary of Defense (Reserve Affairs) *
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Component Representatives *	Deputy Under Secretary of Defense (Acquisition Reform) *
ú PEO	
ú PM	
ú Operators	Deputy Under Secretary of Defense (Advanced Technology) *
ú Senior Information Management Official **	
User *	Deputy Under Secretary of Defense (Environmental Security)
Vice Chairman, Joint Chiefs of Staff	
	Deputy Under Secretary of Defense (Logistics) *
Under Secretary of Defense (Comptroller)	
	Deputy General Counsel
Assistant Secretary of Defense (C3I)	Assistant Secretary of Defense (Acquisition and Logistics) *
	Deputy Director, Defense Research & Engineering *

	Assistant Secretary of Defense (Economic Security) *
Director, Operational Test and Evaluation	

	Assistant Secretary of Defense (Health Affairs) *
Director, Program Analysis and Evaluation	

	Director, Ballistic Missile Defense Organization *
Director, Acquisition Program Integration	

	Director, Defense Intelligence Agency *
Director, Test, Systems Engineering & Evaluation	

	Director, Defense Information Systems Agency **
Chairman, OSD Cost Analysis Improvement Group	

(DAB only) Director, National
 Reconnaissance Office *
 Director, Counterintelligence
 & Defense Security Programs, DASD(C3) *
 OASD(C3I) (DAB only)
 DASD (Information Management)
 Under Secretary of Defense (MAISRC only) *
 (Personnel & Readiness) *
 Director, Continuous Acquisition
 Under Secretary of Defense and Life Cycle Support (CALs) *
 (Policy) *
 Director, Central Imagery Office
 Assistant to the Secretary of *
 Defense (Atomic Energy) *
 Director, Special Programs *

* As required

** Always required for ACAT IAM

Figure 3. OIPT Membership

Continuous, "up-the-line" Communications

WIPT members are expected to ensure that their leadership is in agreement with what the IPT is doing. When issues arise that exceed the limits of empowerment, the PM or IPT leader must allow members adequate time to coordinate issues and positions with their principals. There should be no surprises later when the principals are asked to coordinate or review a final draft document or decision.

Reasoned Disagreement

(Extracted from Secretary Perry's May 10, 1995 memo)

The team is not searching for "lowest common denominator" consensus. There can be disagreement on how to approach a particular issue, but that disagreement must be reasoned disagreement based on an alternative plan of action rather than unyielding opposition. Issues that cannot be resolved by the team must be identified early so that resolution can be achieved as quickly as possible at the appropriate level.

Issues Raised and Resolved Early

The agreements essential to IPT success will be founded on the early identification and resolution of issues. When an issue cannot be resolved by a WIPT, the PM should raise the issue as quickly as possible to a decision-making level where resolution can be achieved.

Figure 4 illustrates decision making steps proceeding from the PM up to the MDA. The objective is to achieve agreement and

resolve issues rapidly at the lowest executive level, without hindering program progress.

Figure 4. Issue Resolution Process

GUIDELINES FOR MEETING MANAGEMENT

Focus. An IPT must have a clear focus or reason for being. The OIPT Leader or PM, as appropriate, must clearly articulate the IPT's focus at the outset of the process. Examples of a specific focus may be to prepare for a decision milestone, to develop and reach agreement on a proposed acquisition strategy, or to resolve a specific issue or set of issues.

Orienting the Team Members. To ensure that all WIPT members have a common understanding of the program, the PM should provide a program overview briefing at the first meeting. Before the first IPT meeting, the PM and his or her staff will develop a proposed program strategy, documentation requirements and WIPT structure. These proposals will be refined by the IIPT and proposed to the OIPT. The PM will proceed based on the OIPT's agreement. Any disagreements will follow the issue resolution process in Figure 4. The IPT members will discuss and agree to a meeting management approach, to include the items listed below.

Agendas. To ensure productive meetings, detailed agendas with timelines for topics and supporting material must be distributed at least three business days before IPT meeting NOT during the meeting. Every effort should be made to use electronic media for distribution. It may prove useful for the PM and the OIPT leader's representative to jointly prepare the agenda to ensure all concerns are addressed.

Frequency of Meetings. Once established, IPTs may meet as often as necessary to understand and build program strategies and to resolve issues or to produce a specified product. With that focus, the IPT will only meet for a particular purpose at a scheduled time. It should not meet regularly or continuously in an "update" or oversight role. Advance notice of a meeting should be provided as soon as the date is known, but at least two weeks before the initial or kick-off meeting and at least three business days before a meeting of an ongoing IPT. Subsequent meetings should be scheduled in association with product completion dates and the resolution of action items from an earlier meeting.

Meeting Summaries. Good meeting summaries will be brief and will preclude revisiting previous agreements and wasting the time and resources of the team members. Meeting summaries should:

- ú Record attendance
- ú Document any decisions or agreements reached by the IPT
- ú Document action items and suspenses
- ú Set the agenda for the next meeting
- ú Frame issues for higher-level resolution

Draft meeting summaries should be provided to IPT members within one working day of a meeting. The final summary should be provided to all members within two working days after the deadline for the receipt of comments.

CONCLUSION

I need your personal involvement and commitment to ensure that the concepts of IPPD and IPTs are effectively implemented. By using the best practices from both the public and private sectors, we can enhance our ability to provide what the warfighter needs, when needed and at a cost that the Department can afford.

William J. Perry
Secretary of Defense